

Fig. 1A

Example User/Website Interaction Data (sorted by user and browsing session)

Example Interaction Element Session Frequency

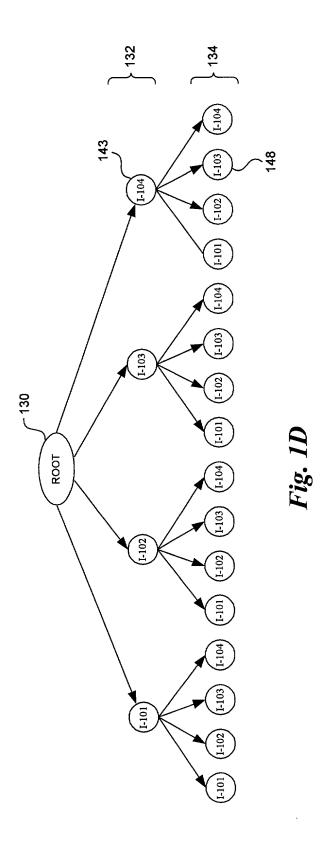
128	Sessions With Interaction	5	5	5	4		1	Ţ		1	-1			\ '
126	Interaction Element Identifier	I-102	I-103	I-104	I-101	I-105	I-106	I-107		J-149	I-150			j
	I							125			•			
124	Interaction Element Identifier	I-103	I-104	I-101	I-102	I-102	I-101	I-102	I-102	I-103	I-104	I-102	I-104	I-103
123	Browsing Session	1		3	3	3	4	4	4	5	5	7	7	7
122	User	-	-	-	_	1	2	2	2	3	3	3	3	3

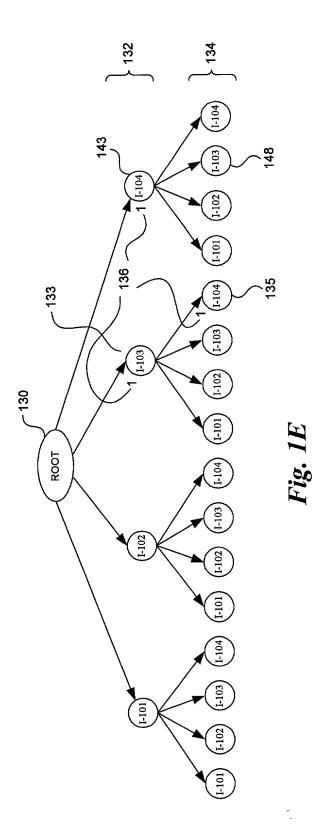
Fig. 1C

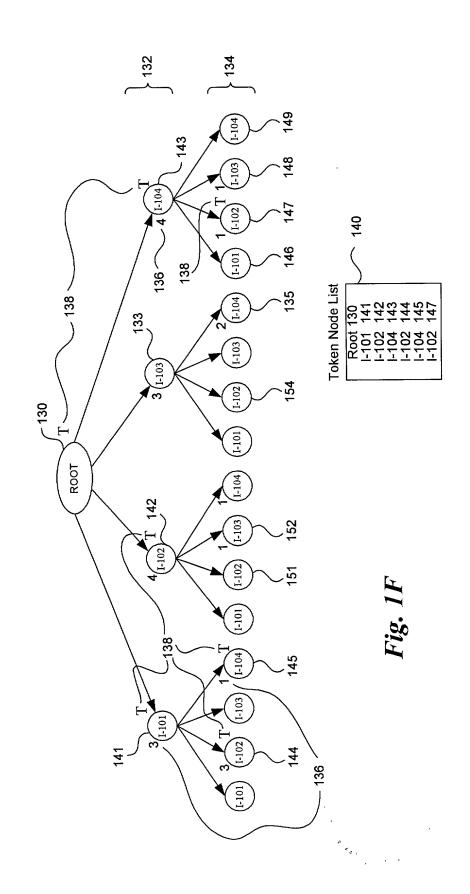
1-101 1-104 1-102 1-103 1-103 1-104 1-101 1-104 1-104 1-106

Fig. 1B

I-149 I-150







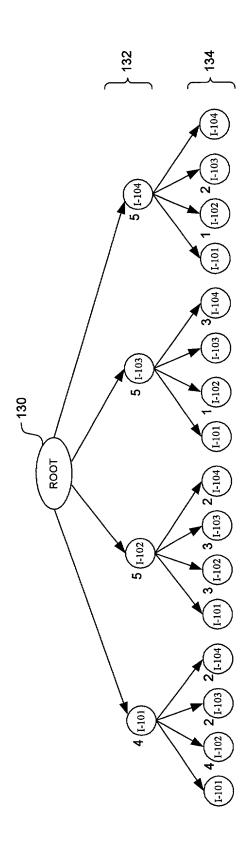
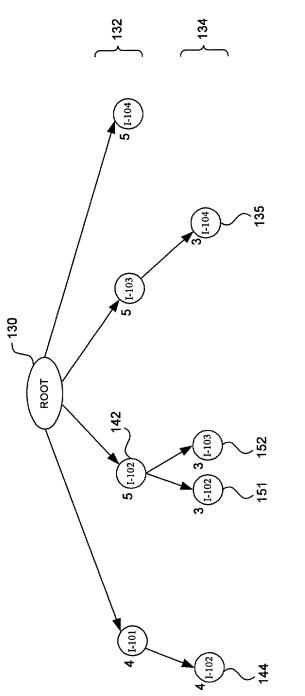


Fig. 1G



rig. 1H

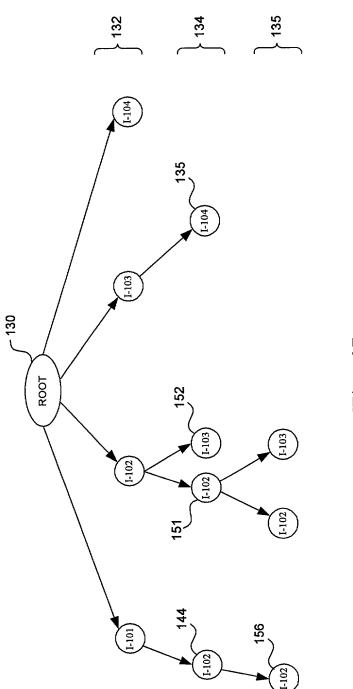
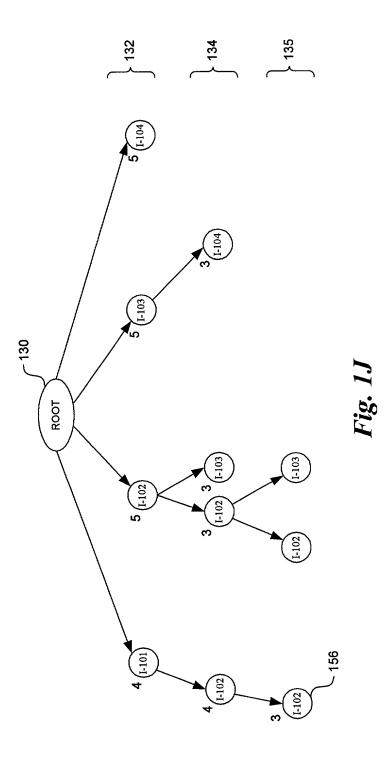
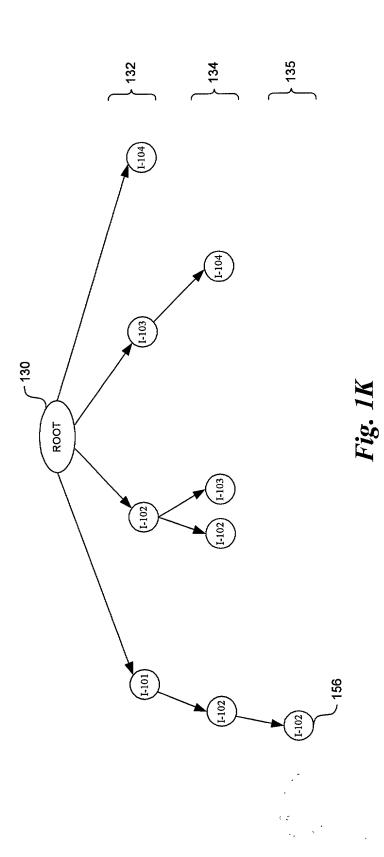
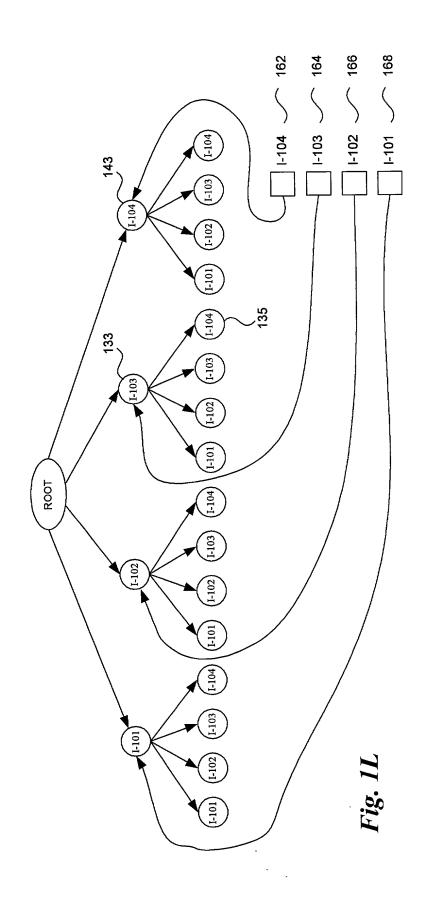
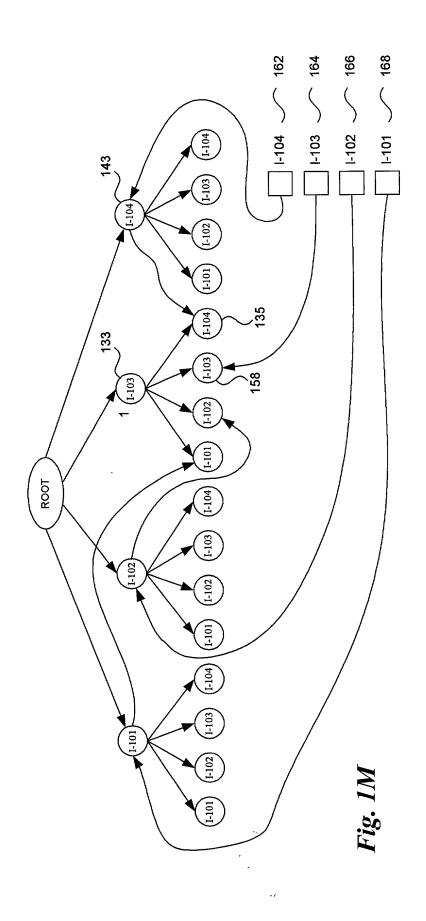


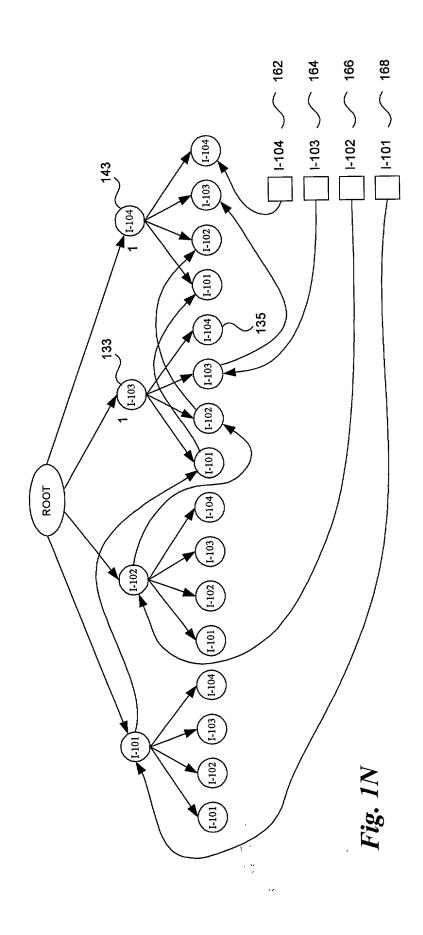
Fig. 11











Example Frequency Sequence Tree Node Data Structures

187	I-103 148	I-104 143	1		2	2	nt I-103	Yes	ı	2	1		3.7 units			
191	Node ID	Node Parent ID	Node Children	ID List	Session Counter	Sequence Length	Last Sequence Element	Token	Next Linked Node	User Counter	Number of Original	Intervening Elements	Cumulative Sequence	Interval Time	•••	
											. .			-		
187	I-103 148	I-104 143	ı		1	2	I-103	No	1		0		1.0 units			
»» •	Node ID	Node Parent ID	Node Children	ID List	Session Counter	Sequence Length	Last Sequence Element	Token	Next Linked Node	User Counter	Number of Original	Intervening Elements	Cumulative Sequence	Interval Time	•••	
190	17,104 143	ROOT 130	I-101 146, I-102 147,	I-103 148, I-104 149	4		1-104	Vec	100	- 7	0		0			
185	TI Node III	172 Node Parent ID		773 ID List	0		176 I and Common Florment	~ ! `	170 Mart Linkad Mode	170 Ileas Compter	Number of Original	180 Intervening Flements	Cumulative Sequence	181 Interval Time		

Fig. 10

Example Frequent 2-Length Sequence Matrix

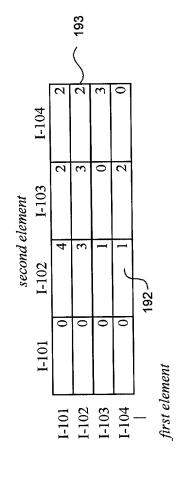


Fig. 1P

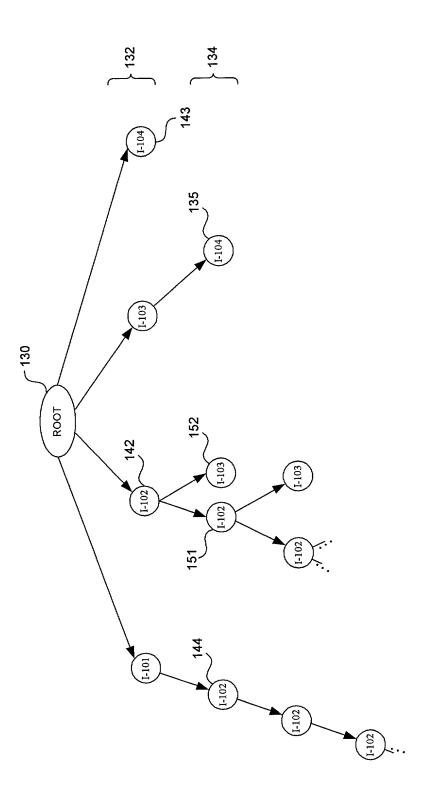


Fig. 1Q

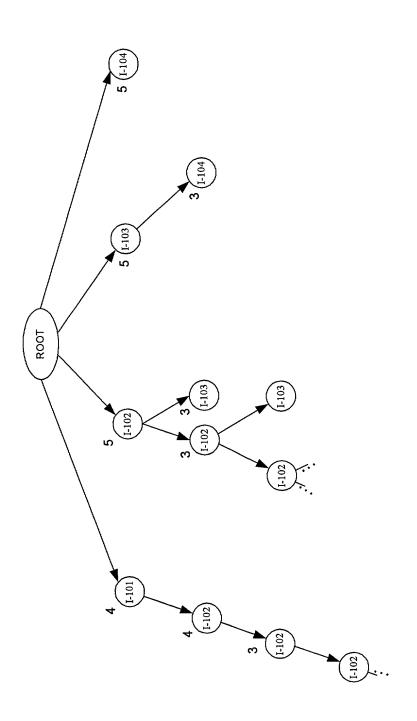


Fig. 1R

10		Example (Example User/Website Interaction Data (sorted by time)	action Data (sorte	ed by time)	
r18. 13		195	196	197	198	199
	User	Browsing	Interaction Event	Interaction Time	Interaction Event	Interaction Event
		Session	Identifier		Category	Price
		1	I-103	x+01.0	Book	High
•	5	2	I-101	x+02.0	CD	Low
1		1	I-104	x+02.4	Clothes	Medium
	5	2	I-102	x+03.0	CD	Medium
•	5	2	I-103	x+04.6	Book	High
- 1		3	1-101	x+05.0	CD	Low
•	2	4	I-101	6'50+x	CD	Low
-	5	2	I-104	x+06.2	Clothes	Medium
\		3	I-102	x+06.5	CD	Medium
_	3	5	I-103	x+07.0	Book	High
-# »	2	4	I-102	x+07.1	CD	Medium
		3	I-102	x+08.0	CD	Medium
	3	5	I-104	x+08.2	Clothes	Medium
	4	9	I-101	x+08.5	CD	Low
104	4	9	I-104	8.60+x	Clothes	Medium
5 \	2	4	I-102	x+10.0	СД	Medium
_	4	9	I-102	x+10.9	CD	Medium
_	3	7	I-102	x+11.2	СД	Medium
_	4	9	I-103	x+12.5	Book	High
	3	7	I-104	x+13.0	Clothes	Medium
	4	9	I-102	x+13.7	CD	Medium
	3	7	I-103	x+14.0	Book	High
	4	9	I-105	x+14.9	TV	Very High
	5	2	J-106	x+15.5	Book	High
	5	2	I-107	x+16.5	Clothes	Medium
_						
	5	2	I-149	x+18.6	Clothes	Medium
	5	2	I-150	x+19.9	Clothes	Medium
			•••			

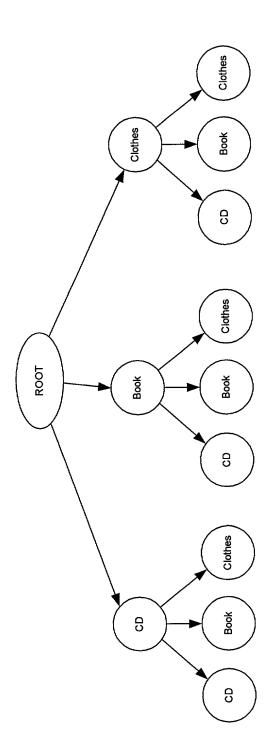
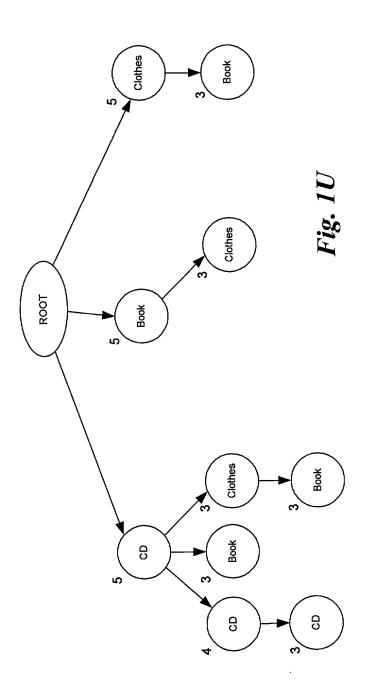
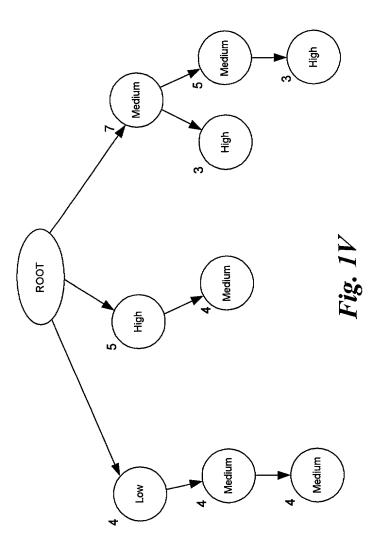


Fig. 1T





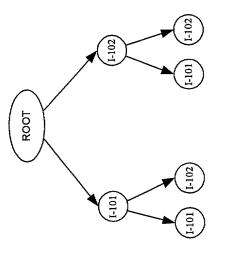


Fig. 1W

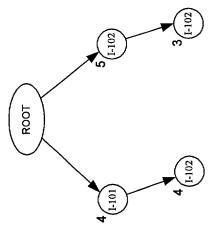
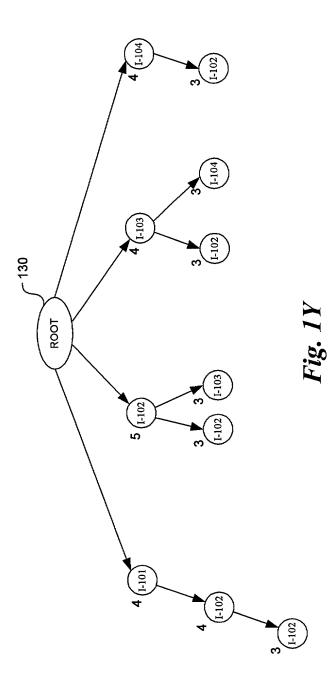
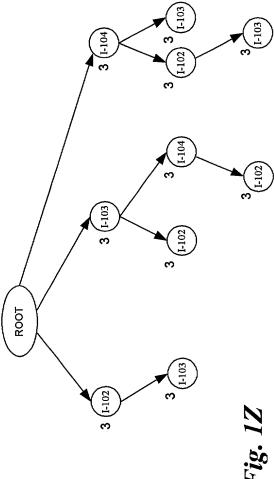
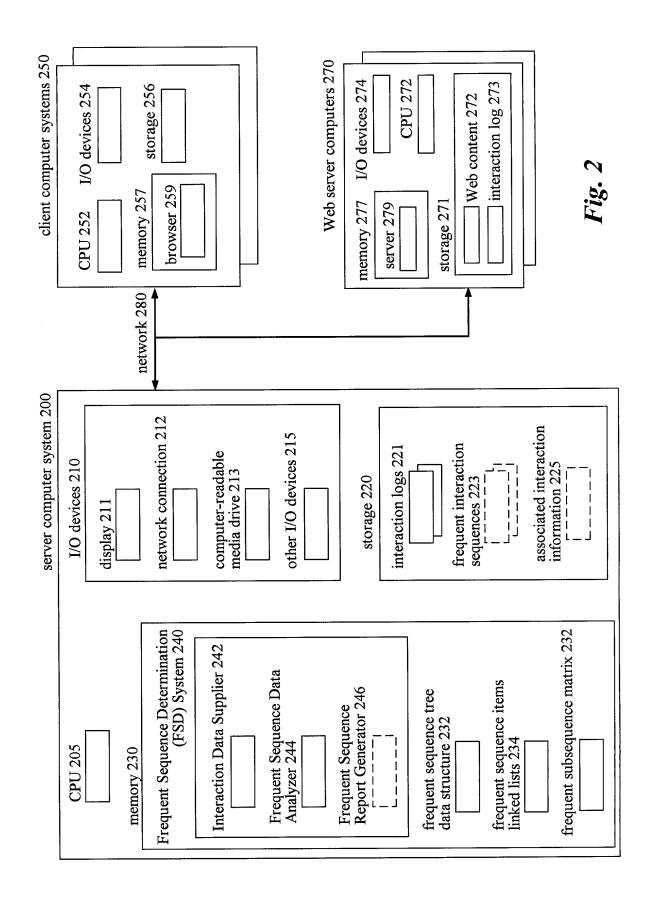
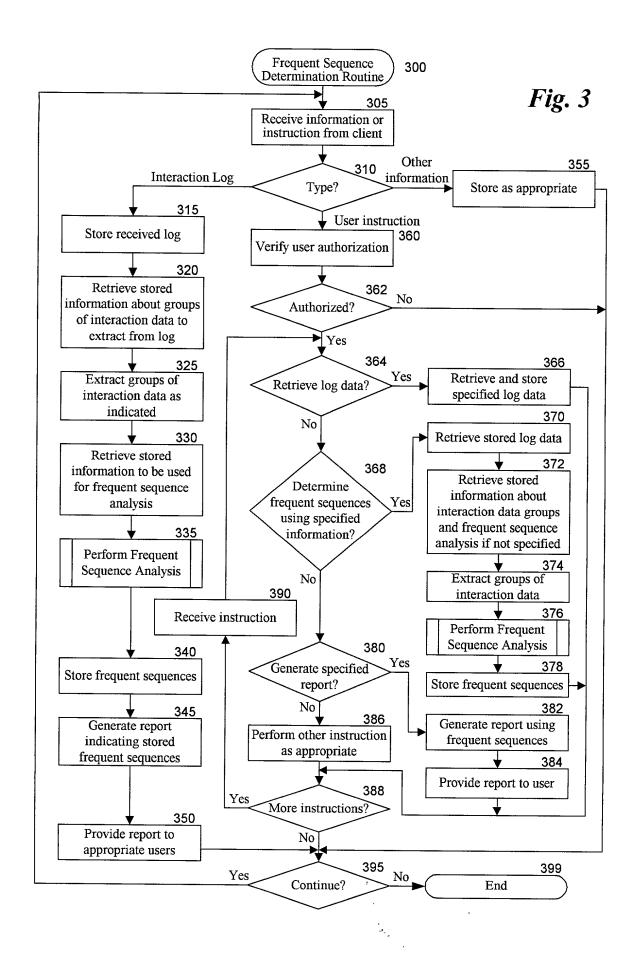


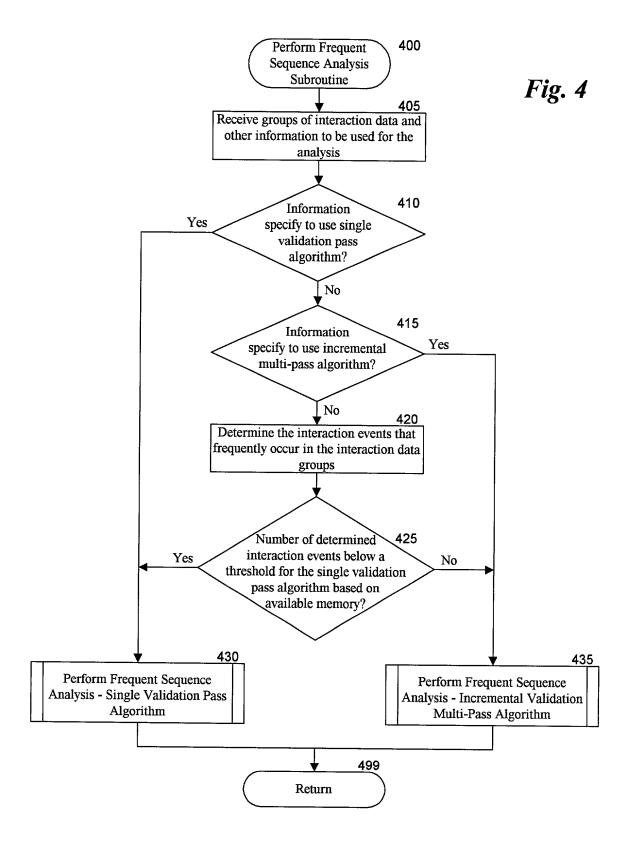
Fig. 1X











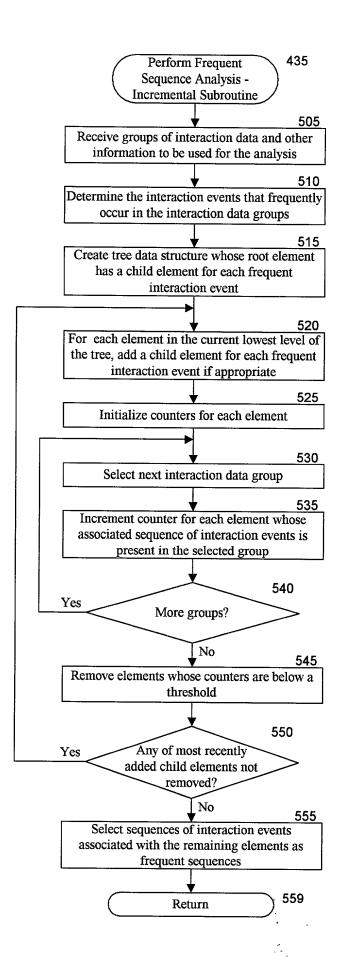


Fig. 5A

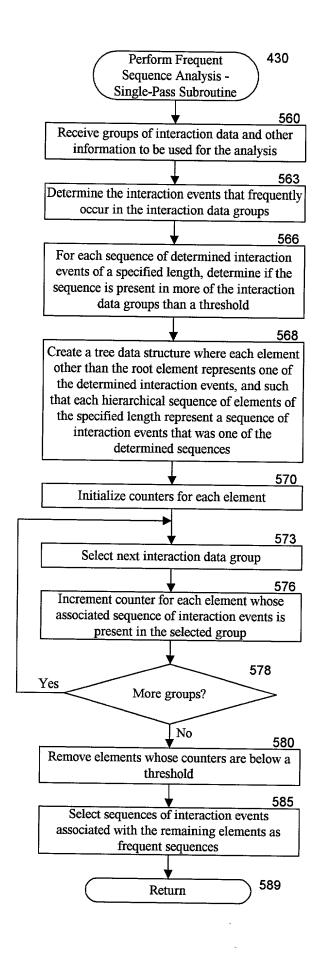


Fig. 5B

